

FACT SHEET

UNION PACIFIC RAILROAD OMAHA SHOPS OPERABLE UNIT No. 1



MARCH 2000

Site Background

The Union Pacific Railroad (UPRR) Omaha Shops are located at 9th and Webster Streets in Omaha, Nebraska. The facility lies just north of downtown Omaha and just west of the Missouri River. The facility was used by the railroad for over 100 years, with its principal functions as a fueling facility, repair shop, paint shop and car body repair shop for the railroad's locomotive and car fleet. In 1988, most of the operations, except the Print Shop and the Car Shop, moved to Little Rock, Arkansas. After the operations were moved, many of the buildings and facilities were demolished. Today, the Car Shop is the only remaining significant railroad maintenance and repair operation on the site.

Previous Investigations and Studies

The Omaha Shops have been the subject of several previous investigations over the past 15 years. These investigations and approximate time frames have included:

Preliminary Studies: Site-wide asbestos and PCB transformer surveys were completed in 1987/1988.

Fuel Recovery System: During construction of the Abbott Drive overpass in 1988, diesel fuel was discovered on the groundwater near the south end of the Omaha Shops. A diesel fuel recovery system was installed and continues to operate today.

Preliminary Site Assessment: A preliminary site assessment including a facility walk-through and historical records search was completed in 1988.

Site Investigation: A field investigation to document site-wide environmental conditions was completed in 1989 and 1990. The investigation focused on former operational areas associated with the railroad's activities at the site.

Phase II Site Assessment: A field investigation to document site-wide environmental conditions was completed in 1989 and 1990. The investigation focused on former operational areas associated with the railroad's activities at the site.

Regulatory History

The primary federal legislation governing the treatment, storage, or disposal of hazardous wastes is the Solid Waste Disposal Act, commonly referred to as the Resource Conservation and Recovery Act (RCRA). In 1980, UPRR notified the United States Environmental Protection Agency (USEPA) that hazardous wastes were generated, stored, or disposed of at the Omaha Shops. In November 1980, UPRR submitted a RCRA Part A permit application to USEPA, requesting permission to store hazardous waste at the Omaha Shops. The existence of the facility on November 19, 1980 and the submittal of the Part A permit application rendered the Omaha Shops subject to the requirements applicable to RCRA interim status facilities. In January 1981, the USEPA formally granted interim status to the Omaha Shops, assigning the facility RCRA identification number NED00829754.

Administrative Order on Consent

The Omaha Shops are the subject of an Administrative Order on Consent ("the Order") under RCRA Section 3008(h) which was signed by USEPA and UPRR on February 29, 2000. The Order includes the following facility-wide objectives:

- Evaluate the need for Interim Measures (IM) at the Omaha Shops to address contamination to relieve threats to human health or the environment.
- Perform IM that are necessary to control contamination at the Omaha Shops or to relieve threats to human health or the environment, or to prevent or minimize the spread of contaminants while long-term corrective measures are being implemented.
- Perform a RCRA Facility Investigation(s) (RFI) to determine the nature and extent of any release of hazardous waste or hazardous constituents at or from the Omaha Shops.
- Perform a Corrective Measures Study(ies) (CMS) to identify and evaluate alternatives for the corrective measures necessary to prevent, mitigate, or remediate any releases of hazardous wastes or hazardous constituents at or from the Omaha Shops.
- Implement necessary corrective measure(s) at the Omaha Shops.



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- Perform any other activities necessary to correct or evaluate actual or potential threats to human health and/or the environment resulting from the release or potential release of hazardous waste or hazardous constituents at or from the Omaha Shops

Operable Units

The Order includes provisions to divide the Omaha Shops into three operable units for ease of administration and to accelerate corrective measures in certain areas. The operable units include the following:

- Operable Unit No. 1 (OU1) includes surface soils above the normal high water table within the portion of the Omaha Shops that is proposed to be acquired by the City of Omaha for development of a public-use building project.
- Operable Unit No. 2 (OU2) includes surface soils above the normal high water table within the portion of the Omaha Shops not included in OU1.
- Operable Unit No. 3 (OU3) includes the groundwater underlying the Omaha Shops, at the normal high water table and below.

Human Health Risk Assessment

UPRR submitted a RFI Draft Report for OU1 to USEPA in June 1999. The OU1 RFI included a detailed human health risk assessment. The risk assessment evaluated the following exposure scenarios:

- **Occupational receptors (on-site workers)** exposed to chemicals in surface soil from ingestion, dermal contact, and inhalation of fugitive dust.
- **Construction workers** exposed to chemicals in surface and subsurface soils from ingestion, dermal contact, and inhalation of fugitive dust and volatile chemicals.
- **Recreational users or trespassers** exposed to chemicals in surface soils from ingestion, dermal contact, and inhalation of fugitive dust.

The risk assessment concluded:

Occupational Receptors: The USEPA's Technical Review Workgroup (TRW) for Lead was used to derive a preliminary remediation goal (PRG) of 1,218 milligrams per kilogram (mg/kg) for lead in soil at OU1. Twenty soil samples in OU1 (primarily surface soil) exceeded the PRG of 1,218 mg/kg for lead. Occupational receptors would not be exposed to subsurface soil. No other unacceptable health risks were identified for occupational receptors in OU1.

Construction Workers: No adverse health risks for construction worker exposure to soil were identified for OU1.

Recreational Users/Trespassers: No unacceptable adverse health risks were identified for recreational user/trespasser exposure to surface soil at OU1. Recreational users/trespassers would not be exposed to subsurface soil.

Other Environmental Considerations

The human health risk assessment indicates that unacceptable adverse health risks at OU1 are limited only to lead exposure for occupational receptors. UPRR also proposes to take action to clean up asbestos and petroleum hydrocarbons found at the site, as described in the following paragraphs:

Asbestos: The asbestos standard (OSHA 1926.1101) defines asbestos-containing material as any material containing more than one percent asbestos. This standard applies to construction work where employees have the potential to be exposed to asbestos. Based on the potential for construction worker exposure to asbestos in soil at the Omaha Shops, the asbestos standard will apply.

Petroleum Hydrocarbons: Elevated levels of petroleum hydrocarbons in soil and groundwater at OU1 are confined to the southeast portion of the site and are associated with former locomotive fueling activities. No adverse health risks were identified for exposure to petroleum-related chemicals in soil at OU1. The Nebraska Department of Environmental Quality (NDEQ) groundwater standards and regulations governing the cleanup of petroleum-contaminated soil and groundwater will apply to this area of OU1. UPRR has proposed an action level of 3,800 mg/kg for total extractable hydrocarbons (TEH) in soil.

Proposed Corrective Action

UPRR has proposed several corrective measures to address the environmental conditions at OU1. These corrective measures are described in detail in the following documents:

- Draft OU1 Corrective Measures Study (February 2000)
- Draft Asbestos Interim Measures Planning Memorandum (January 3, 2000)
- Draft Free Phase Recovery Area Interim Measures Planning Memorandum (February 16, 2000)

These documents are included in an information repository that has been established at the W. Dale Clarke Library at 215 S. 15th Street and are available during normal library hours.

UPRR proposed corrective actions at OU1 are shown on the attached Figure 1 and include the following:

Asbestos: Excavate soils containing greater than one percent asbestos, remove from the site, and dispose in an off-site licensed disposal facility.

Lead: Excavate surface soils containing greater than 1,218 mg/kg lead, place in the roadway bridge embankment for the Cumming Street extension, and cover with clean soil.

Petroleum Hydrocarbons: Excavate soil containing greater than 3,800 mg/kg TEH, remove from the site, and dispose at an off-site, licensed disposal facility.

